

IN THE SPECIFICATION

In the specification please replace the paragraph beginning on page 2 line 25 and ending on page 3 line 15 with the following:

Referring to FIG. 1 there is shown a one wire bus system to which are connected various I-buttons (110, 112, 114) that report the status of their associated subsystems (116, 118, 120). The subsystems are part of an electronic system whose status is monitored by a processor (not shown) residing on transceiver circuit 102. Although not shown the subsystems are interconnected to form an electrical system remotely located from transceiver 102. In addition to a processor transceiver circuit 102 contains transmitter circuits and receiver circuits and other supporting circuitry that allow the processor to comply with the one wire bus I-button protocol. Transceiver 102 transmits queries onto one wire bus 106 specified for a particular I-button residing on a particular subsystem. The queried I-button responds to the query reporting the existence and status of the system on which it is currently residing. The I-buttons on each of the subsystems are electrically connected to these subsystems which many times contain stray capacitances and have noise that ultimately leaks onto the one wire bus. One of the reasons for such stray or leakage capacitance and noise is that the transceiver system, the subsystems and the I-buttons all use the same ground reference level 108. Thus a common path for circuit components on the subsystems, the I-buttons and the transceiver allows noise to leak through to the bus. Moreover each of the I-buttons uses capacitance as a means to store the internal voltage to the I-Button thereby storing information. Although these capacitances are diode isolated from the one wire bus, a relatively small portion of this capacitance is seen on the bus. The aggregate capacitance from the

subsystems and the I-buttons adversely affects the communication signals on the bus.

The communication signals are signals that switch from logic high (i.e., 5 volts) to logic low (i.e., 0 volt).